Structured Parking Site Selection and Preliminary Feasibility Study for the City of College Park, MD

FINAL REPORT

Submitted to:



Submitted by:

DESMAN
ASSOCIATES

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Introduction

DESMAN Associates was contracted by the City of College Park, Maryland to perform a parking structure feasibility study. The following information presents the existing parking inventory, peak parking utilization and evaluates future parking need taking into consideration future development and vacancy absorption. The inventory and utilization information will be summarized to identify relative parking surplus and deficit conditions. This information represents the foundation upon which future needs will be projected. The relationship of peak period parking occupancy to land use inventory was evaluated using parking demand factors unique to the urban condition in College Park. Various parking factors and adjustments used to estimate peak demand will be introduced and finally, the analysis estimates future parking deficits by block give development and vacancy absorption activity.

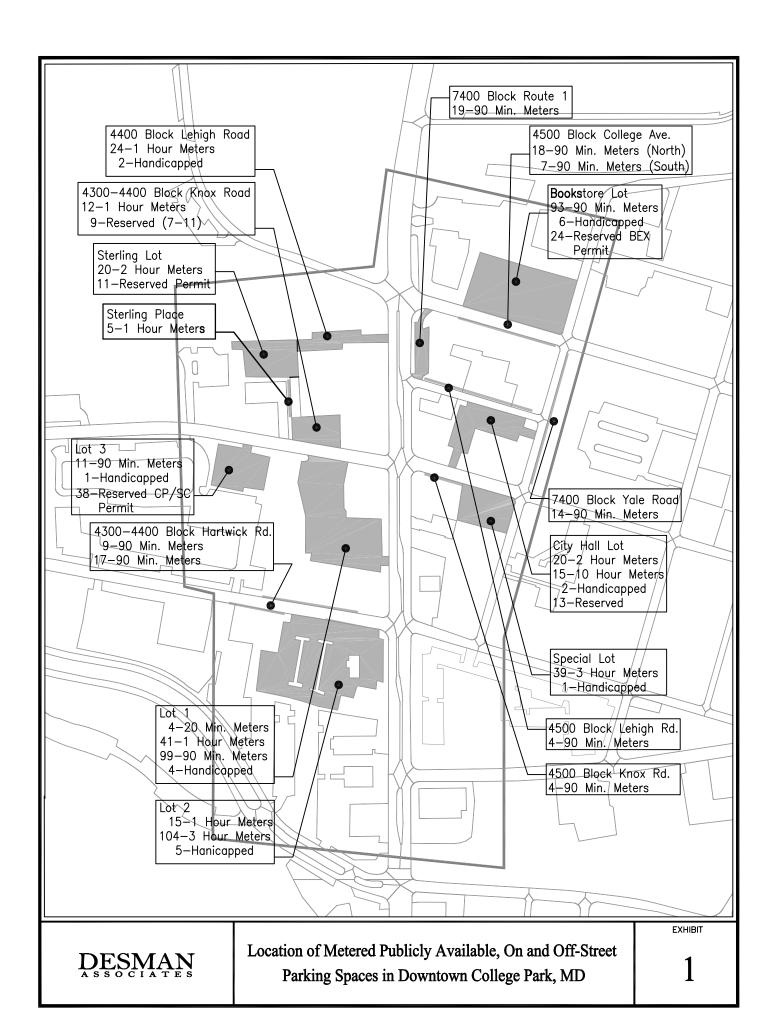
Ultimately, this background of information was used to evaluate various sites that could support structured parking. For the sites that were selected for further analysis, DESMAN development parking functional layouts (grade level, typical level and roof level drawings) that were used to determine parking capacity (spaces), construction costs, and operating costs. A preliminary financial feasibility study was then prepared, estimating the number of long-term (permit) and short-term (hourly) parkers that would frequent the facility, and estimating the market rate for parking and the potential annual revenue.

Study Area

The primary study area included all publicly available and private/restricted on and off-street parking spaces located in the downtown section of the City of College Park. For the purpose of this study the general boundaries were confined to one block West and East of US Route 1 between Calvert Road and Fraternity Row.

Parking Supply

The locations of the publicly available and private/restricted on and off-street parking spaces included as part of this survey are shown on Exhibit 1. Publicly available parking is defined as those spaces available to the general public regardless of trip purpose. Thus, a publicly available lot could be publicly or privately owned and operated. In College Park private property owners are under an agreement with the city to provide metered public parking, making the public parking provided in College Park not a permanent entity. Private/restricted parking is only available to specific users. An example would include the spaces in Lot 3 restricted for persons possessing a CP/SC permit. All other users are prohibited. Table 1a and 1b and the aforementioned Exhibit illustrate the parking





restrictions and meter type. Overall, the study area consists of a total of 537 publicly available spaces located in ten (10) off-street facilities, 75 publicly available on-street spaces, and 145 private/restricted spaces. There are a total of 757 parking spaces within the study area. The meter restrictions in the study area range from 20 minutes in Lot 1, in front of the CVS (for quick pick-up and drop-off), to 10 hour meters located in the City Hall Lot.

Table 1a - Supply of On and Off-Street Publicly Available Parking

	Capacity	Restrictions
Bookstore Lot	93	90 Minute Meters
	6	Handicapped
7400 Blk. Route 1	19	90 Minute Meters
City Hall Lot	20	2 Hour Meters
	15	10 Hour Meters
	2	Handicapped
Special Lot	39	3 Hour Meters
-	1	Handicapped
Lot 2	15	1 Hour Meters
	104	3 Hour Meters
	5	Handicapped
Lot 1	4	20 Minute Meters
	41	1 Hour Meters
	99	90 Minute Meters
	4	Handicapped
Lot 3	11	90 Minute Meters
	1	Handicapped
4300-4400 Blk. Knox Road	12	1 Hour Meters
Sterling Lot	20	2 Hour Meters
4400 Blk. Lehigh Road	24	1 Hour Meters
	2	Handicapped
Off-Street Total	537	
4500 Blk. College Avenue	12	90 Minute Meters (North)
	7	90 Minute Meters (South)
4500 Blk. Lehigh Road	7	90 Minute Meters (North)
4500 Blk. Knox Road	4	90 Minute Meters (South)
7400 Blk. Yale Road	14	90 Minute Meters (East)
4300-4400 Blk. Hartwick Road	9	90 Minute Meters (North)
	17	90 Minute Meters (South)
Sterling Place	5	1 Hour Meters
On-Street Total	75	
TOTAL	612	

Table 1b -Supply of Private Restricted Parking

	Capacity	Restrictions
City Hall Lot	13	Reserved
Bookstore Lot	24	Reserved
Sterling Lot	11	Reserved
4300-4400 blk. Knox Road	9	Reserved
Lot 3	38	Reserved
Private Gravel Lot	50	Reserved
TOTAL	145	



Parking Occupancy

DESMAN inventoried all publicly available and private/restricted on and offstreet parking spaces within the study area. DESMAN collected parking utilization by physically accessing lots and performing vehicle occupancy counts. The counts were conducted on Wednesday, November 20, 2002 at Noon and Thursday, November 21, 2002 at 9:00 p.m. These time periods were decided upon in an effort to capture both typical weekday and weekday evening parking activity during the peak hours of utilization. The results of these occupancy surveys are found in Table 2a, 2b, 3a and 3b of this report.

Capacity | Occupancy | % Restrictions

Table 2a - Public Parking Occupancy Survey (Day)

	Capacity	Occupancy	%	Restrictions
Bookstore Lot	93	18	19%	90 Minute Meters
	6	0	0%	Handicapped
7400 Blk. Route 1	19	9	47%	90 Minute Meters
City Hall Lot	20	20	100%	2 Hour Meters
	15	14	93%	10 Hour Meters
	2	1	50%	Handicapped
Special Lot	39	30	77%	3 Hour Meters
	1	0	0%	Handicapped
Lot 2	15	11	73%	1 Hour Meters
	104	56	54%	3 Hour Meters
	5	3	60%	Handicapped
Lot 1	4	1	25%	20 Minute Meters
	41	30	73%	1 Hour Meters
	99	62	63%	90 Minute Meters
	4	0	0%	Handicapped
Lot 3	11	7	64%	90 Minute Meters
	1	1	100%	Handicapped
4300-4400 Blk. Knox Road	12	10	83%	1 Hour Meters
Sterling Lot	20	20	100%	2 Hour Meters
4400 Blk. Lehigh Road	24	24	100%	1 Hour Meters
	2	2	100%	Handicapped
Off-Street Total	537	319	59%	
4500 Blk. College Avenue	12	11	92%	90 Minute Meters (North)
•	7	6	86%	90 Minute Meters (South)
4500 Blk. Lehigh Road	7	7	100%	90 Minute Meters (North)
4500 Blk. Knox Road	4	1	25%	90 Minute Meters (South)
7400 Blk. Yale Road	14	2	14%	90 Minute Meters (East)
4300-4400 Blk. Hartwick Road	9	9	100%	90 Minute Meters (North)
	17	15	88%	90 Minute Meters (South)
Sterling Place	5	5	100%	1 Hour Meters
On-Street Total	75	56	75%	
TOTAL	612	375	61%	



Table 2b - Private Parking Occupancy Survey (Day)

	Capacity	Occupancy	%	Restrictions
City Hall Lot	13	13	100%	Reserved
Bookstore Lot	24	22	92%	Reserved
Sterling Lot	11	10	91%	Reserved
4300-4400 Block Knox Road	9	6	67%	Reserved
Lot 3	38	33	87%	Reserved
Private Gravel Lot	50	50	100%	Reserved
TOTAL	145	134	92%	

Table 3a - Public Parking Occupancy Survey (Evening)

	Capacity	Occupancy	%	Restrictions
Bookstore Lot	93	0	0%	90 Minute Meters
	6	0	0%	Handicapped
7400 Blk. Route 1	19	15	79%	90 Minute Meters
City Hall Lot	20	20	100%	2 Hour Meters
	15	15	100%	10 Hour Meters
	2	0	0%	Handicapped
Special Lot	39	32	82%	3 Hour Meters
	1	0	0%	Handicapped
Lot 2	15	14	93%	1 Hour Meters
	104	83	80%	3 Hour Meters
	5	3	60%	Handicapped
Lot 1	4	3	75%	20 Minute Meters
	41	38	93%	1 Hour Meters
	99	93	94%	90 Minute Meters
	4	1	25%	Handicapped
Lot 3	11	9	82%	90 Minute Meters
	1	0	0%	Handicapped
4300-4400 Blk. Knox Road	12	11	92%	1 Hour Meters
Sterling Lot	20	20	100%	2 Hour Meters
4400 Blk. Lehigh Road	24	23	96%	1 Hour Meters
	2	1	50%	Handicapped
Off-Street Total	537	381	71%	
4500 Blk. College Avenue	12	1	8%	90 Minute Meters (North)
	7	1	14%	90 Minute Meters (South)
4500 Blk. Lehigh Road	7	4	57%	90 Minute Meters (North)
4500 Blk. Knox Road	4	4	100%	90 Minute Meters (South)
7400 Blk. Yale Road	14	11	79%	90 Minute Meters (East)
4300-4400 Blk. Hartwick Road	9	9	100%	90 Minute Meters (North)
	17	16	94%	90 Minute Meters (South)
Sterling Place	5	3	60%	1 Hour Meters
On-Street Total	75	49	65%	
TOTAL	612	430	70%	



Table 3b - Private Parking Occupancy Survey (Evening)

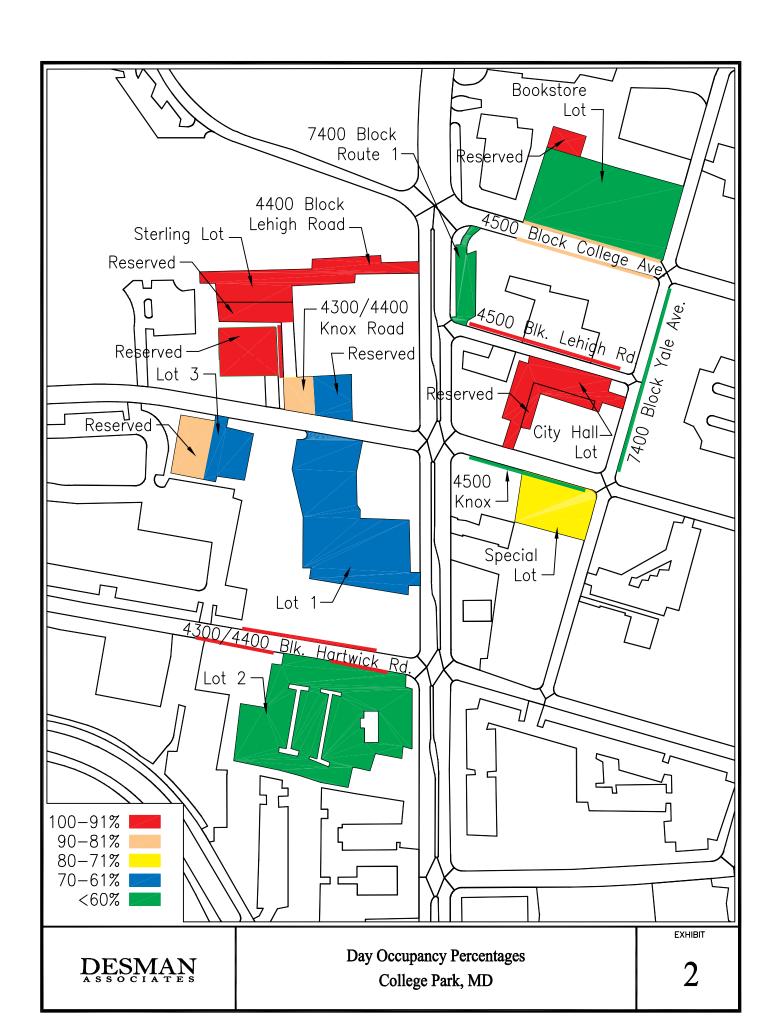
	Capacity	Occupancy	%	Restrictions
City Hall Lot	13	6	46%	Reserved
Bookstore Lot	24	3	13%	Reserved
Sterling Lot	11	6	55%	Reserved
4300-4400 Blk. Knox Road	9	4	44%	Reserved
Lot 3	38	22	58%	Reserved
Private Reserved Lot	50	30	60%	Reserved
TOTAL	145	71	49%	

Of the 612 metered publicly available parking spaces, 375 spaces (61%) were occupied during the day peak period (Table 2a) and 430 spaces (70%) were occupied during the evening peak period (Table 3a). Note, however, during the evening count none of the Bookstore Lot parking spaces were occupied and during the day count there was only a 19% occupancy rate. This would indicate that there is not a high demand for parking at the Bookstore Lot. If this lot were to be eliminated from the calculation, the occupancy total would increase to 70% occupied during the day peak period and 84% occupied during the evening peak period for publicly available parking spaces. As for private/restricted occupancy, Table 2b shows that 134 of the 145 spaces were occupied during the day peak period. However, only 71 or 49% of the private/restricted spaces were occupied during the evening.

Exhibit 2 shows occupancy percentage at each on and off-street location during the day peak period. Exhibit 3 shows the occupancy percentage during the evening peak period. The lots that are highlighted in red have an occupancy percentage greater then 90%.

Parking Surplus/Deficit

Table 4a, 4b, 5a and 5b identifies the peak period surplus/deficit in downtown College Park for both the day and evening observations. Before the surplus/deficit figures can be analyzed, some discussion of the concept of practical capacity is required. Practical capacity reflects the operational efficiency of a parking system, beyond which users find difficulty in finding an available space, thus increasing their level of frustration and the opportunity for vehicle/vehicle and vehicle/pedestrian conflict. Good planning and design practice suggest a parking surplus of 5% over peak demand should be provided for employee parking. That surplus should be increased to 10% for visitor parking given their lack of familiarity and their higher turnover rates. In this case, a 90% practical capacity is applied to all publicly available surveyed spaces and 95% will be applied to the private/restricted.



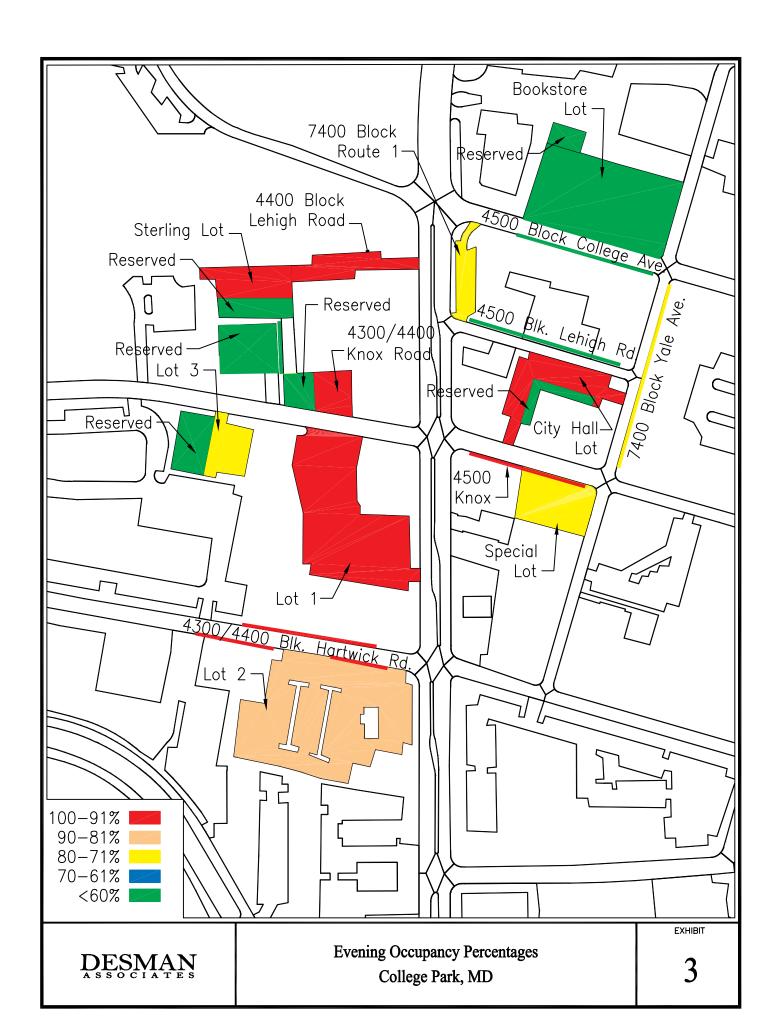




Table 4a - Existing Publicly Available Parking Surplus/Deficit (Day)

	Parking	Practical	Peak		Surplus/
	Supply	Capacity (90%)	Occupancy	%	Deficit
Bookstore Lot	99	89	18	18%	71
7400 Blk. Route 1	19	17	9	47%	8
City Hall Lot	37	33	35	95%	-2
Special Lot	40	36	30	75%	6
Lot 2	124	112	70	56%	42
Lot 1	148	133	93	63%	40
Lot 3	12	11	8	67%	3
4300-4400 Blk. Knox Road	12	11	10	83%	1
Sterling Lot	20	18	20	100%	-2
4400 Blk. Lehigh Road	26	23	26	100%	-3
Off-Street Total	537	483	319	59%	164
4500 Blk. College Avenue	19	17	17	89%	0
4500 Blk. Lehigh Road	7	6	7	100%	-1
4500 Blk. Knox Road	4	4	1	25%	3
7400 Blk. Yale Road	14	13	2	14%	11
4300-4400 Blk. Hartwick Road	26	23	24	92%	-1
Sterling Place	5	5	5	100%	-1
On-Street Total	75	68	56	75%	12
TOTAL	612	551	375	61%	176

Table 4b - Existing Private Restricted Parking Surplu/Deficit (Day)

	Parking	Practical	Peak		Surplus/
	Supply	Capacity (95%)	Occupancy	%	Deficit
City Hall Lot	13	12	13	100%	-1
Bookstore Lot	24	22	22	92%	0
Sterling Lot	11	10	10	91%	0
4300-4400 Block Knox Road	9	8	6	67%	2
Lot 3	38	34	33	87%	1
Private Gravel Lot	50	45	50	100%	-5
TOTAL	145	131	134	92%	-4



Table 5a - Existing Publicly Available Parking Surplus/Deficit (Evening)

	Parking	Practical	Peak		Surplus/
	Supply	Capacity (90%)	Occupancy	%	Deficit
Bookstore Lot	99	89	0	0%	89
7400 Blk. Route 1	19	17	15	79%	2
City Hall Lot	37	33	35	95%	-2
Special Lot	40	36	32	80%	4
Lot 2	124	112	100	81%	12
Lot 1	148	133	135	91%	-2
Lot 3	12	11	9	75%	2
4300-4400 Blk. Knox Road	12	11	11	92%	0
Sterling Lot	20	18	20	100%	-2
4400 Blk. Lehigh Road	26	23	24	92%	-1
Off-Street Total	537	483	381	71%	102
4500 Blk. College Avenue	19	17	2	11%	15
4500 Blk. Lehigh Road	7	6	4	57%	2
4500 Blk. Knox Road	4	4	4	100%	0
7400 Blk. Yale Road	14	13	11	79%	2
4300-4400 Blk. Hartwick Road	26	23	25	96%	-2
Sterling Place	5	5	3	60%	2
On-Street Total	75	68	49	65%	19
TOTAL	612	551	430	70%	121

Table 5b - Existing Private/Restricted Parking Surplus/Deficit (Evening)

	Parking Supply	Practical Capacity (95%)	Peak Occupancy	%	Surplus/ Deficit
	Suppry	Capacity (9370)	Occupancy	/0	Deficit
City Hall Lot	13	12	6	46%	6
Bookstore Lot	24	22	3	13%	19
Sterling Lot	11	10	6	55%	4
4300-4400 Blk. Knox Road	9	8	4	44%	4
Lot 3	38	34	22	58%	12
Private Gravel Lot	50	45	30	60%	15
TOTAL	145	131	71	49%	60



The current data indicates that there is a surplus of 176 publicly available parking spaces during the day peak period in the downtown area. The abundance of available parking spaces were located in the Bookstore Lot, Lot 2 and Lot 1. During the evening peak period it was observed that there was a surplus of 121 publicly available parking spaces. Unlike the surplus of spaces Lot 1 exhibited during the day survey, a 2 space deficit occurred during the evening peak period. However, as noted before, the Bookstore Lot had a large surplus of spaces (89 spaces). On-street parking observations exhibited a 12 space surplus during the day and a 19 space surplus during the evening. It is interesting to note, that the utilization of on-street spaces change from the day survey to the evening survey. During the day survey there was a large surplus of spaces on Yale Rd (15 spaces). However, during the evening survey, Yale Rd. had only a 2 space surplus.

Private/restricted lots showed a 4 space deficit during the day peak period but a 60 space surplus during the evening peak. The relatively high surplus of spaces during the evening peak in the private/restricted spaces is indicative of the activities the persons occupying these spaces take part in.

Land Use

Exhibit 4 shows the block coding used during calculating the parking demand for the land use in downtown College Park. The land use information was provided by the Planning Department of College Park. Land use parking demand factors used in determining the peak hour parking generation are per-unit measures. These land use parking demand factors are unique to each land use component. For example, every 1,000 square feet of occupied office space will generate 3 parked vehicles during the typical peak weekday activity period at an office building, which generally occurs between 10:00 a.m. and 2:00 p.m. Table 6 illustrates the weekday peak parking demand factors that DESMAN believes are relevant in downtown College Park.

		Spaces per
Land Use	Parking Space Units	Weekday
General Office	Per 1,000 SF GLA	3.0
Retail	Per 1,000 SF GLA	3.8
Restaurant	Per 1,000 SF GLA	10.0
Hotel	Per Room	1.25

NOTES:

GLA = Gross Leasble Area

Source: Urban Land Institute, Institute of Transportation Engineers, DESMAN Experience





It should be noted that these factors are not the same as the parking regulations under the Prince Georges County Zoning Ordinance. They are a combination of Urban Land Institute, Institute of Transportation Engineers, and DESMAN experience. DESMAN understands that many older properties within the study area do not provide any of the parking that is required under the current ordinance. The Planning Department has also indicated that there are a total of 226 parking space waivers that have been approved by the City or MNCPPC in the study area.

Parking needs associated with different activities (office, retail, etc.) fluctuate differently throughout a day. Furthermore, different activates generate different types of parkers with different expectations (hours of use, duration of stay, parking rates, customer services levels, etc.). The daylong activity patterns and peak activity periods associated with various land uses are quite different. For example, the vehicle arrival and departure patterns for an office building relate to the work hours of office building employees. Parking generation for an office building is greatest at about 10:00 a.m. when most employees are at work and visitors typically begin arriving. Conversely, the arrival and departure patterns of vehicles generated by a hotel relate to overnight room occupancy. Parking generation for a hotel is greatest between the hours of 10:00 p.m. and 7:00 a.m. when most hotel guests are in their rooms. The hourly accumulation of vehicles for each of the types of land use occurring in downtown College Park is illustrated in Table 7.

Table 7 Representative Hourly Accumulation by Percent of Peak Hour (Weekday)									
Hour of Day	<u>Office</u>	<u>Retail</u>	Restaurant	<u>Hotel</u>					
6:00 AM	3%	0%	0%	100%					
7:00 AM	20%	8%	2%	85%					
8:00 AM	63%	18%	5%	65%					
9:00 AM	93%	42%	10%	55%					
10:00 AM	100%	68%	20%	45%					
11:00 AM	100%	87%	30%	35%					
12:00 Noon	90%	97%	50%	30%					
1:00 PM	90%	100%	70%	30%					
2:00 PM	97%	97%	60%	35%					
3:00 PM	93%	95%	60%	35%					
4:00 PM	77%	87%	50%	45%					
5:00 PM	47%	79%	70%	60%					
6:00 PM	23%	82%	90%	70%					
7:00 PM	7%	89%	100%	75%					
8:00 PM	7%	87%	100%	90%					
9:00 PM	3%	61%	100%	95%					
10:00 PM	3%	32%	90%	100%					
11:00 PM	0%	13%	70%	100%					
12:00 Midnight	0%	0%	50%	100%					



Downtown College Park is unique due to the fact that numerous patrons walk to their destination from outside the study area. A pedestrian factor has been figured into the calculation for peak hour demand. Just as parking patterns fluctuate with land use type, so does the amount of patrons arriving by foot. The factor fluctuates from day to evening demand calculations. These factors were determined by a combination of both information received during the stakeholder interviews and DESMAN experience.

Table 8 shows the parking peak hour demand using the land use present today and taking into consideration vacancy present in College Park. During the day peak hour there is a 695 space demand. With the 757 currently available parking spaces there could be a 14 space deficit for parking area wide. Moreover, certain City blocks exhibit particular deficit conditions during the peak daytime period. Block 1, which is bound by Route 1, Hartwick Rd., and Guilford Dr., exhibits a 73 space deficit. Block 4, which is bound by Route 1, Hartwick, and Know Rd., exhibits a 68 space deficit. It is presumed, in reality, that the deficit conditions in one block are satisfied by the surplus conditions in another.

Table 8 - Peak Hour (Day) Demand for Land Use Taking into Consideration the Present Vacancy

Development			Land Use/ Population	Pedestrian		Peak Hour	Peak Hour	Provided	Operational	Peak Hour
Name	Densit	y	Factor	Factor	Peak Demand	Percentage	Demand	Parking	Capacity	Surplus/Deficit
Block 1										
Restaurant	7,000	SF	0.01	0.6	28	50%	14			
Retail	10,000	SF	0.0038	0.4	23	97%	22			
Office	60,700	SF	0.003	0.1	182	90%	164			
Total Block 1	77,700	SF			233		200	141	127	-73
Block 2										
Retail	46,445	SF	0.0038	0.4	106	97%	103			
Restaurant	11,561	SF	0.01	0.6	46	50%	23			
Office	13,739	SF	0.003	0.1	41	90%	37			
Total Block 2	71,745	SF			193		163	207	186	23
Block 3										
Retail	14,694	SF	0.0038	0.4	34	97%	32			
Restaurant	22,043	SF	0.01	0.6	88	50%	44			
Total Block 3	36,737	SF			122		77	133	120	43
Block 4										
Retail	3,800	SF	0.0038	0.4	9	97%	8			
Restaurant	8,575	SF	0.01	0.6	34	50%	17			
Office	24,000	SF	0.0038	0.1	91	90%	82			
Total Block 4	36,375	SF			134		108	44	40	-68
Block 5										
Retail	1,000	SF	0.0038	0.4	2	97%	2			
Restaurant	5,800	SF	0.01	0.6	23	50%	12			
Office	11,610	SF	0.0038	0.1	44	90%	40			
Total Block 5	18,410	SF			70		54	57	51	-2
Block 6										
Retail/Offic	1,500	SF	0.0034	0.25	4	94%	4			
Restaurant	6,706	SF	0.01	0.6	27	50%	13			
Retail	8,628	SF	0.0038	0.4	20	97%	19			
Total Block 6	16,834	SF			50		36	40	36	0
Block 7										
Retail	26,500	SF	0.0038	0.4	60	97%	59	135	122	63
Total	284,301	SF			862		695	757	681	-14



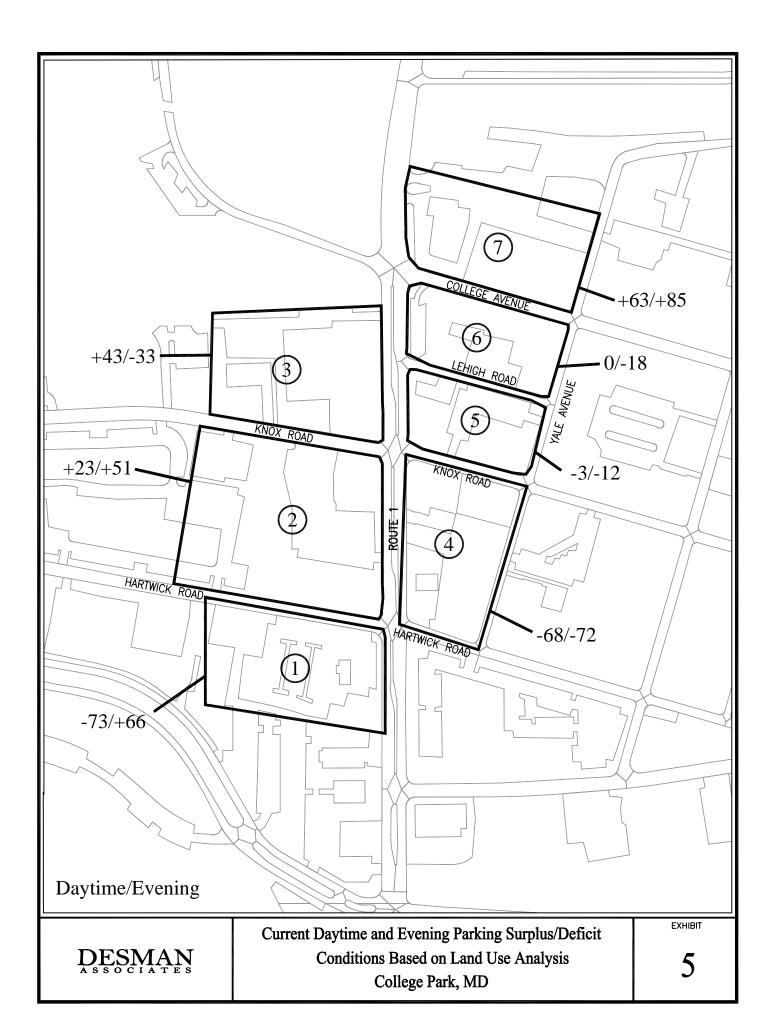
The same analysis was completed for a weekday evening condition (see Table 9). While a 66 space surplus exists overall, Block 3, 4, 5, and 6 exhibited deficit conditions.

Table 9 - Peak Hour (Evening) Demand for Land Use Taking into Consideration the Present Vacancy

Development			Land Use/ Population	Pedestrian		Peak Hour	Peak Hour	Provided	Operational	Peak Hour
Name	Densit	v	Factor	Factor	Peak Demand	Percentage	Demand	Parking	Capacity	Surplus/Deficit
Block 1										
Restaurant	7,000	SF	0.01	0.4	42	100%	42			
Retail	10,000	SF	0.0038	0.4	23	61%	14			
Office	60,700	SF	0.003		182	3%	5			
Total Block 1	77,700	SF			247		61	141	127	66
Block 2										
Retail	46,445	SF	0.0038	0.4	106	61%	65			
Restaurant	11,561	SF	0.01	0.4	69	100%	69			
Office	13,739	SF	0.003		41	3%	1			
Total Block 2	71,745	SF			216		135	207	186	51
Block 3										
Retail	14,694	SF	0.0038	0.4	34	61%	20			
Restaurant	22,043	SF	0.01	0.4	132	100%	132			
Total Block 3	36,737	SF			166		153	133	120	-33
Block 4										
Retail	3,800	SF	0.0038	0.4	9	61%	5			
Restaurant	8,575	SF	0.01	0.4	51	100%	51			
Office	24,000	SF	0.0038		91	61%	56			
Total Block 4	36,375	SF			151		112	44	40	-73
Block 5										
Retail	1,000	SF	0.0038	0.4	2	61%	1			
Restaurant	5,800	SF	0.01	0.4	35	100%	35			
Office	11,610	SF	0.0038		44	61%	27			
Total Block 5	18,410	SF			81		63	57	51	-12
Block 6										
Retail/Offic	1,500	SF	0.0034	0.2	4	32%	1			
Restaurant	6,706	SF	0.01	0.4	40	100%	40			
Retail	8,628	SF	0.0038	0.4	20	61%	12			
Total Block 6	16,834	SF			64		54	40	36	-18
Block 7				·		·		·		·
Retail	26,500	SF	0.0038	0.4	60	61%	37	135	122	85
Total	284,301	SF			986		615	757	681	66

Exhibit 5 presents a more graphic image of the future surplus and deficit figures estimated in Tables 8 and 9.

This analysis reflects a character of College Park employees, shoppers, diners, and visitors that is dominated by the presence of thousands of students at the nearby University of Maryland who walk to jobs, restaurants and stores. As noted in this analysis (Tables 8 and 9) employers and business owners noted that between 20% and 60% of employees and patrons walk to their businesses. As such, the parking demand ratios for the various types of land use activity are reduced to reflect this fact. However, planners and retailers alike would suggest that as the businesses in College Park reposition the marketing of their services away from students to higher wage population groups the demand for parking associated with these same land uses would increase. For example, a restaurant





that caters to students, i.e., fast, low cost food, would see an increase in parking activity if their clientele shifts to the employees (lunch time) and residents (evening) who live and work in a high-dollar region of the area.

While this is a theoretical condition, DESMAN wished to estimate the future parking surplus or deficit condition under this condition nonetheless. Table 10 and 11 revisit the daytime and evening land use/parking demand analysis that was presented previously by reducing the pedestrian factors from 20% and 60% to 10% and 20%, respectively.

Table 10 - Peak Hour (Day) Demand for Land Use Taking into Consideration the Present Vacancy and Adjusting to Reflect Increased Auto Oriented Travel Mode Patterns (Reduced Pedestrian Factor)

Development			Land Use/ Population	Pedestrian	Peak	Peak Hour	Peak Hour	Provided	Operational	Peak Hour
Name	Densit	y	Factor	Factor	Demand	Percentage	Demand	Parking	Capacity	Surplus/Deficit
Block 1										
Restaurant	7,000	SF	0.01	0.2	56	50%	28			
Retail	10,000	SF	0.0038	0.1	34	97%	33			
Office	60,700	SF	0.003	0	182	90%	164			
Total Block 1	77,700	SF			272		225	141	127	-98
Block 2										
Retail	46,445	SF	0.0038	0.1	159	97%	154			
Restaurant	11,561	SF	0.01	0.2	92	50%	46			
Office	13,739	SF	0.003	0	41	90%	37			
Total Block 2	71,745	SF			293		237	207	186	-51
Block 3										
Retail	14,694	SF	0.0038	0.1	50	97%	49			
Restaurant	22,043	SF	0.01	0.2	176	50%	88			
Total Block 3	36,737	SF			227		137	133	120	-17
Block 4										
Retail	3,800	SF	0.0038	0.1	13	97%	13			
Restaurant	8,575	SF	0.01	0.2	69	50%	34			
Office	24,000	SF	0.0038	0	91	90%	82			
Total Block 4	36,375	SF			173		129	44	40	-89
Block 5										
Retail	1,000	SF	0.0038	0.1	3	97%	3			
Restaurant	5,800	SF	0.01	0.2	46	50%	23			
Office	11,610	SF	0.0038	0	44	90%	40			
Total Block 5	18,410	SF			94		66	57	51	-15
Block 6										
Retail/Offic	1,500	SF	0.0034	0.1	5	94%	4			
Restaurant	6,706	SF	0.01	0.2	54	50%	27			
Retail	8,628	SF	0.0038	0.1	30	97%	29			
Total Block 6	16,834	SF			88		60	40	36	-24
Block 7										
Retail	26,500	SF	0.0038	0.1	91	97%	88	135	122	34
Total	284,301	SF			1,237		942	757	681	-261

Presuming that businesses would generate more suburban, auto-oriented parking characteristics, then the demand for parking would grow considerably. Parking deficits ranging from 15 spaces in Block 5 to 98 spaces in Block 1 would exist in all areas except Block 7. All in all, a daytime, system-wide deficit of 261 spaces would be anticipated.



Table 11 - Peak Hour (Evening) Demand for Land Use Taking into Consideration the Present Vacancy and Adjusting to Reflect Increased Auto Oriented Travel Mode Patterns (Reduced Pedestrian Factor)

Development			Land Use/ Population	Pedestrian	Peak	Peak Hour	Peak Hour	Provided	Operational	Peak Hour
Name	Densit	y	Factor	Factor	Demand	Percentage	Demand	Parking	Capacity	Surplus/Deficit
Block 1										
Restaurant	7,000	SF	0.01	0.1	63	100%	63			
Retail	10,000	SF	0.0038	0.1	34	61%	21			
Office	60,700	SF	0.003		182	3%	5			
Total Block 1	77,700	SF			279		89	141	127	38
Block 2										
Retail	46,445	SF	0.0038	0.1	159	61%	97			
Restaurant	11,561	SF	0.01	0.1	104	100%	104			
Office	13,739	SF	0.003		41	3%	1			
Total Block 2	71,745	SF			304		202	207	186	-16
Block 3										
Retail	14,694	SF	0.0038	0.1	50	61%	31			
Restaurant	22,043	SF	0.01	0.1	198	100%	198			
Total Block 3	36,737	SF			249		229	133	120	-109
Block 4										
Retail	3,800	SF	0.0038	0.1	13	61%	8			
Restaurant	8,575	SF	0.01	0.1	77	100%	77			
Office	24,000	SF	0.0038		91	61%	56			
Total Block 4	36,375	SF			181		141	44	40	-101
Block 5										
Retail	1,000	SF	0.0038	0.1	3	61%	2			
Restaurant	5,800	SF	0.01	0.1	52	100%	52			
Office	11,610	SF	0.0038		44	61%	27			
Total Block 5	18,410	SF			100		81	57	51	-30
Block 6										
Retail/Offic	1,500	SF	0.0034	0	5	32%	2			
Restaurant	6,706	SF	0.01	0.1	60	100%	60			
Retail	8,628	SF	0.0038	0.1	30	61%	18			
Total Block 6	16,834	SF			95		80	40	36	-44
Block 7	•									
Retail	26,500	SF	0.0038	0.1	91	61%	55	135	122	66
Total	284,301	SF			1,299		878	757	681	-196

The evening condition under the auto reorientation scenario would be less critical than the daytime condition but pronounced parking deficits would develop nonetheless. Blocks 3 and 4 would experience 109 and 101 space deficits, respectively. Overall, a system-wide deficit of 196 spaces would be anticipated.

Assessment of Future Parking Conditions

DESMAN obtained information from the City of College Park Planning Department on known, proposed, and potential development projects within the study area. The former Sunoco Site and potential absorption of presently vacant space were identified. Table 12 summarizes the information that was provided for each development.



Table 12 - Known, Proposed and Potential Development Activity

Project Name/Vacant Space	Block	Land Use Type	Density
Former Sunoco Site	4	Retail	13,000
Presently Vacant Restaurant	2	Restaurant	1,961
Presently Vacant Restaurant	3	Restaurant	14,696
Presently Vacant Restaurant	6	Retail	7,518

To determine the future demand for parking associated with new development and vacancy absorption, the factors and adjustments presented in Phase I are applied to the development information. Table 13a and 13b below illustrate the parking demand (day and evening) associated with each development under future condition.

Table 13a - Peak Parking Demand Resulting from Future Development (Day)

				Peak Weekday	Pedestrian	Peak Hour	
Project Name/Vacant Space	Block	Land Use Type	Density	Demand Factor	Factor	Adjustment	Demand
Former Sunoco Site	4	Retail	13,000	0.0038	0.4	97%	19
Presently Vacant Restaurant	2	Restaurant	1,961	0.01	0.6	50%	6
Presently Vacant Restaurant	3	Restaurant	14,696	0.01	0.6	50%	44
Presently Vacant Restaurant	6	Retail	7,518	0.0038	0.4	97%	11

Table 13b - Peak Parking Demand Resulting from Future Development (Evening)

				Peak Weeknight	Pedestrian	Peak Hour	
Project Name/Vacant Space	Block	Land Use Type	Density	Demand Factor	Factor	Adjustment	Demand
Former Sunoco Site	4	Retail	13,000	0.0038	0.4	61%	12
Presently Vacant Restaurant	2	Restaurant	1,961	0.01	0.4	100%	8
Presently Vacant Restaurant	3	Restaurant	14,696	0.01	0.4	100%	59
Presently Vacant Restaurant	6	Retail	7,518	0.0038	0.4	61%	7

During the peak weekday (12 p.m.) period, and adjusting for pedestrian patrons, the projects will create a daytime demand for 80 spaces. During the peak weekday evening (9 p.m.) period, and adjusting for pedestrian patrons, the projects will create an evening demand for 86 spaces.

To determine future parking surplus/deficit conditions for each city block within the study area DESMAN layered the development generated demand into the existing parking supply and utilization conditions. Table 14a and 14b below presents the layering of development impact onto the current public parking surplus/deficit figures by block. The table shows that during the peak weekday period the parking deficit of 14 spaces will increase to 95, with the individual deficit within Block 5 increasing to 87 spaces. During the peak weekday evening period there still be an anticipated deficit of 19 spaces overall.



Table 14a - Future Daytime Parking Surplus/Deficit by Block

Block	Current Supply	Practical Capacity	Current Demand	Future/Addl. Demand	Surplus/ Deficit (1)
1	141	127	200	0	-73
2	207	186	163	6	17
3	133	120	77	44	-1
4	44	40	108	19	-87
5	57	51	54	0	-3
6	40	36	36	11	-11
7	135	122	59	0	63
Total	757	682	697	80	-95

Table 14b - Future Evening Parking Surplus/Deficit by Block

Block	Current Supply	Practical Capacity	Current Demand	Future/Addl. Demand	Surplus/ Deficit (1)
1	141	127	61	0	66
2	207	186	135	8	43
3	133	120	153	59	-92
4	44	40	112	12	-84
5	57	51	63	0	-12
6	40	36	54	7	-25
7	135	122	37	0	85
Total	757	682	615	86	-19

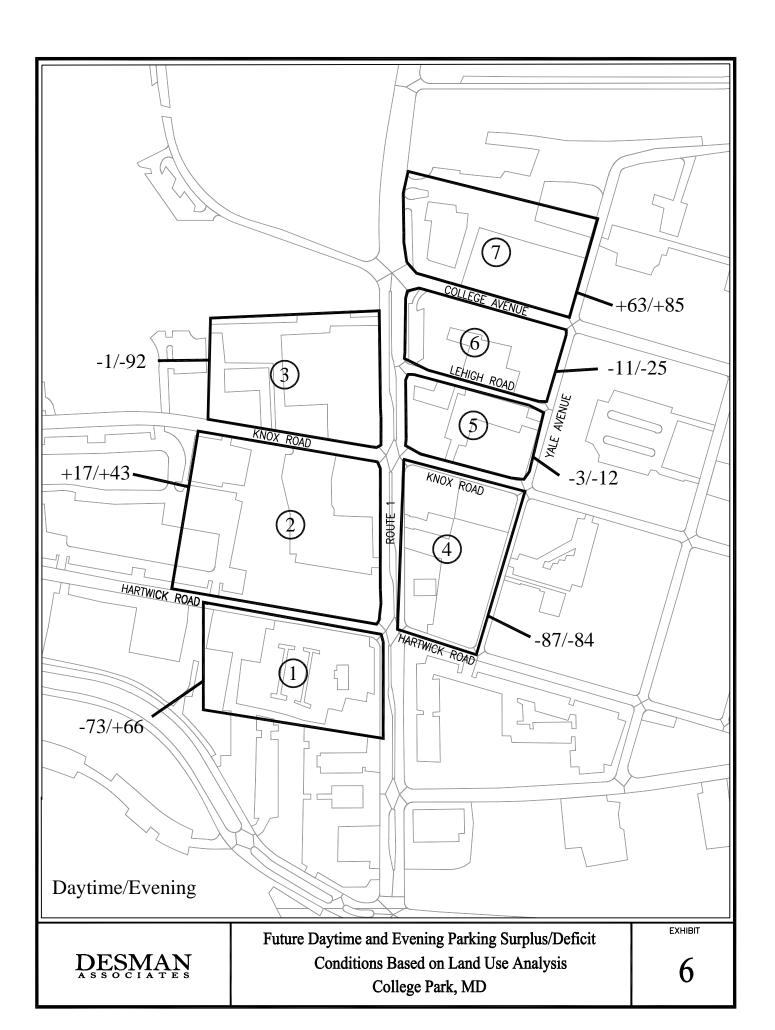
Footnote: (1) Surplus/deficit equals practical capacity minus current utilization minus future/additional demand.

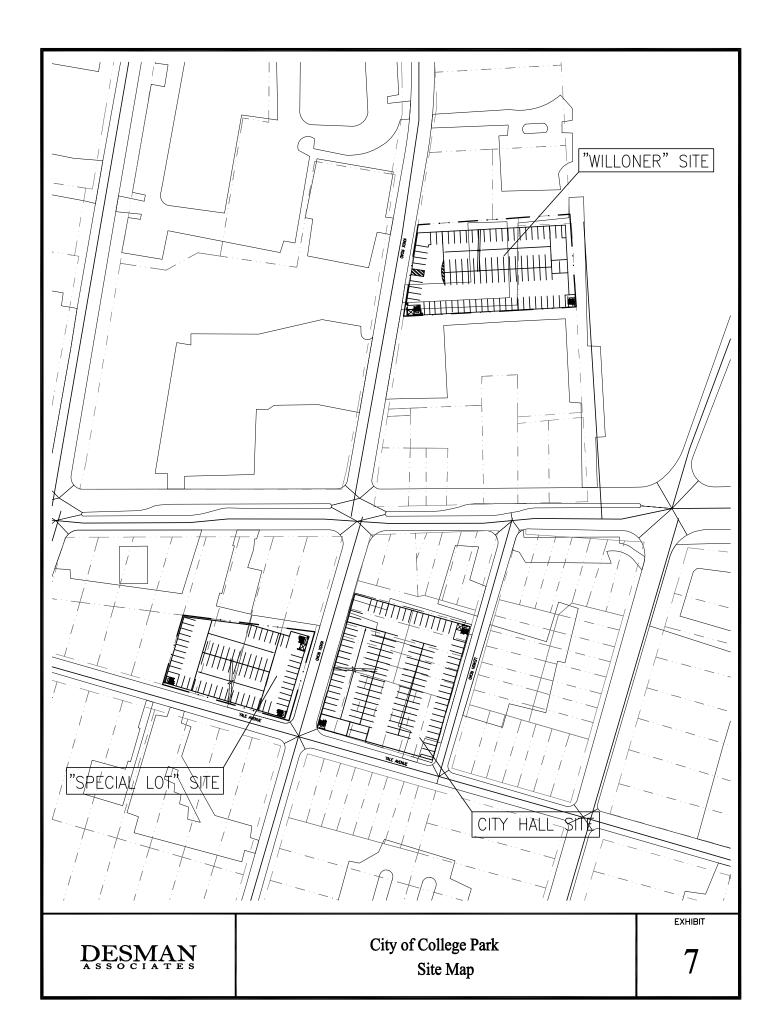
Exhibit 6 presents a more graphic representation of the future surplus and deficit figures estimated in Tables 14a and 14b.

Structured Parking Concepts

Working with City representatives, DESMAN evaluated the opportunity to develop a structured parking facility on a select number of locations within the study area. Exhibit 7 illustrates the three locations that were more closely considered. While other sites had the physical potential to support a parking structure, including the Bookstore Lot, and property east of City Hall off Yale Avenue to name a few, the three sites illustrated here, the "Willoner" site, the City Hall site, and the Special Lot site, were selected for further study and comparative analysis given their location to current and projected parking deficits (see Exhibit 5 and 6).

As the goal of this portion of the study is to select two sites for more detailed design/evaluation, DESMAN needed to educate the reader on basic parking design parameters and guidelines. Parking structures are simply surface lots that ramp up to additional supported levels. As parking stalls are typically 18 ft. long







and 9 ft. wide, and as typical two-way drive isles (90-degree parking) are 24 ft. wide, the standard parking bay equals 60 ft. (18+18+24). In order to circulate up and down, two drive isles are required. Therefore, the typical garage should be 124 ft. wide (including 4' for parapet walls and columns). Similarly, the length of the structure must be sufficient to permit the parking ramp to climb the required distance to the next parking level (from 5 to 10 ft. depending on design) while not exceeding a 5-6% slope. For example, a garage which requires a 10 ft. floor to floor ramping system (single helix) with a 5% slope would require 200 ft. of sloping floor plus another 27 to 45 ft. on each end (depending on traffic pattern) for a total of 248 to 290 ft.

These design standards can be reduced depending on the type of traffic flow (one-way), the angle of parking (less than 90 degrees), and the type of ramping system (single or double helix) employed. Unfortunately, such modifications reduce the design efficiency and increase the per space construction costs. Design efficiency is best defined by the number of square feet required to provide a single parking stall. As a rough rule of thumb, and in a perfect world, an efficiently designed parking structure should require no more than 320 square feet per space.

Based on the basic parking design parameters, and an evaluation of such factors as proximity to current and future deficits, vehicular accessibility, impact on adjacent/historic resources, and each site's inherent design efficiency (or inefficiency), DESMAN and the City selected two sites for the financial feasibility evaluation, the "Willoner" site and the City Hall site.

For each of these sites, DESMAN identified the site boundaries and dimensions, topographic conditions, and roadway directional flow. Once the boundaries were defined, DESMAN's functional designer developed typically level structured parking layouts for each site, identifying vehicle entry/exit points, drive aisles, directional traffic flow, and internal ramping. The Appendix section to this report presents the detailed parking concepts for the two subject locations.

"Willoner" Site Concepts, Cost Estimates and Financial Feasibility

Appendix Exhibit A1 through A3 illustrate the grade level, typical level, and roof level parking layout for a structure on the "Willoner" site. Vehicles would enter the structure via Knox Rd. As many as 278 parking spaces could be developed on four parking levels (grade plus three supported). A parking structure on this site would be relatively efficient as the square feet per space calculation equals 329 (anything under 320 is optimal). Presuming a relatively high level of architectural/façade treatment, and therefore a \$40 per square foot construction cost figure, the per space cost to construct is estimated at \$13,157, or \$3,657,600. Note that the design also includes 4,930 square feet of integrated flex space, presumably retail. The retail component is an optional development



consideration that could be used to improve the possibility for land acquisition from the owner. With the retail component, the total construction cost is estimated at \$4,150,000. Table 15a presents the space, area, and cost figure calculations.

Table 15a
Site A-The "Willoner" Property
Space Count and Construction Cost Estimate

Area / Car Count Area / Car Count Area (Sq.Ft.) | Sq.Ft./Space Level **Spaces** 10,470 Roof 29 361 91 29,500 324 Three 91 29,500 324 Two 67 21,970 328 One Total 278 91,440 329

Building Area Summary & Construction Cost Estimate

Total Area =	96,370 sf
Total Retail Area =	4,930 sf
Total Parking Area =	91,440 sf

Per Unit Construction Cost Figures (per Square Foot)

Parking Cost =	\$40	sf
Retail (Shell) Cost =	\$100	sf

Total & Per Space Construction Costs

Total Parking Area =	\$3,657,600
Total Retail Area =	\$493,000

Total Construction Cost =	\$4,150,600
Per Space Construction Cost =	\$13,157

It must be noted that the development of structured parking on this site would displace approximately 86 existing surface parking spaces, including the Sterling Lot (31 metered and reserved spaces), parking on Sterling Place (5 space) and 50 private/reserved spaces in a dirt and gravel lot.

Project cost calculations include not only construction costs, but cost associated with professional services (architects, engineers, inspection, legal services, etc.), and financing costs, all culminating in a determination of Annual Debt Service Payment (mortgage payment). Table 15b presents these calculations. Based on these figures, and assumptions regarding interest rate and term, the 25 year annual debt service payment on the project is estimated at \$434,700. No land acquisition costs have been included in this analysis. The cost of land acquisition, unknown at this time, would significantly increase the project costs and, therefore, the annual debt service payment. For example, if the cost to acquire the land equaled



\$1 million (for discussion purposes only), the debt service payment would increase to \$530,000, or roughly \$100,000 more per year for each additional \$1 million in project cost.

Table 15b Site A-The "Willoner" Property Parking Development Cost Calculation

PROJECT COST CALCULATION	
Construction (1)	\$4,150,600
Professional Services (2)	\$415,060
Total Development Cost	\$4,565,660
Financing Costs	
Cost of Issuance and Other Fees (3)	\$166,710
Debt Service Reserves (4)	\$434,700
Net Interest During Construction (5)	\$390,110
Subtotal:	\$991,520
Total Project Cost	\$5,557,180
LOAN CALCULATION (6)	
Principal	\$5,557,180
Interest Rate	6.0%
Term (years)	25
Annual Debt Service	\$434,700

NOTE:

- (1)For purposes of comparing parking development costs, these figures exclude any retail space construction costs.
- (2) Professional Services include architectual/engineering fees, survey, soil reporting and testing, P.E. inspection, and legal services and is approximately 10% of construction costs.
- (3) Approximately 3% of total project cost.
- (4) Equal to one year annual debt service.
- $(5) \ Capitalized \ interest \ during \ first \ 14 \ mo \ minus \ interest \ earned \ on \ construction \ budget \ during \ periodic \ drawdowns.$
- (6) The loan calculation was illustrated for comparative purposes only as significant financial information is required from the City.

Parking revenue and operating costs are difficult to estimate as considerable forces beyond the scope of this study effects parking demand, parking rates, and levels of garage staffing, security and operation. As such, any revenue or expense figures presented here are considered preliminary as a much more involved revenue bond feasibility study is required. Nonetheless, the figures presented here are based on DESMAN's understanding of current and future demand and prevailing parking rates in the area.

Table 15c estimates the annual parking revenue that would be generated by monthly permits, residential permits (24 hour reserved parking), weekday transient parkers, and weekend transient parkers. The "Willoner" site, more than any other site studied in this analysis, has the potential to capture monthly parking



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demand associated with residents of the area, namely University students. Parking in the "Knox Box" area of College Park has always been insufficient. Furthermore, the University itself prohibits incoming freshmen students from having a vehicle on campus. As such, DESMAN would suggest that there is considerable latent demand for monthly residential parking. However, we are unsure of the market rate for such spaces. Are students, or more directly their parents, willing to pay \$60, \$80, or even \$100 per space per month for 24-hour hour reserved parking? Based on these assumptions, and a \$550 per space per year operating cost (cashier, insurance, utilities, maintenance), it is estimated that the "Willoner" site could yield an annual operating profit of \$175,280 before debt service.

Table 15c Site A-The "Willoner" Property Parking Revenue and Operating Expense Estimates

Monthly Permits	\$31,680
(40 spaces * 1.1 oversell * \$60/mo.)	
Residential (Student) Monthly Permits	\$96,000
(100 spaces * 1.0 oversell * \$80/mo.)	
Weekday Transients	\$182,000
(100 spaces *3.5 car turnover * \$2 avg. ticket)	
Weekend Transients	\$72,800
(100 spaces * 3.5 car turnover * \$2 avg. rate * 104 days)	
Total Annual Parking Revenue	\$286,480
Total Annual Parking Revenue	\$286,480
Total Annual Parking Revenue Annual Operating Expenses	\$286,480
=	\$286,480 \$111,200
Annual Operating Expenses	
Annual Operating Expenses	

Table 15d presents a 15-Year proforma analysis of the "Willoner" garage. It includes annual revenue and expense escalations. During the first full year of parking operations (Year 2004), the garage would generate a net loss of \$233,340 (Debt Service Cover of 0.46). Obviously, given prevailing parking rates in College Park, the relatively low demand for additional short-term parking spaces (see Exhibits 5 and 6), and the typical cost to construct, operate and maintain parking structures, a parking garage on the "Willoner" site would not be self supporting. The relevancy of structured parking ability to be financially self-sufficient will be discussed in an upcoming section.

Table 15d
Site A-The "Willoner" Property
Proforma: Statement of Operations and Debt Service Coverage

	FY 2002 (1) Year 1	FY 2003 Year 2	FY 2004 Year 3	FY 2008 Year 4	FY 2006 Year 5	FY 2007 Year 6	FY 2008 Year 7	FY 2009 Year 8	FY 2010 Year 9	FY 2011 Year 10	FY 2012 Year 11	FY 2013 Year 12	FY 2014 Year 13	FY 2015 Year 14	FY 2016 Year 15
Parking Income (2) Interest on Reserve (3)	\$286,480 \$26,080	\$286,480 \$26,080	\$315,128 \$26,080	\$315,128 \$26,080	\$346,640 \$26,080	\$346,640 \$26,080	\$381,300 \$34,776	\$381,300 \$34,776	\$419,430 \$34,776	\$419,430 \$34,776	\$461,370 \$34,776	\$461,370 \$34,776	\$507,510 \$34,776	\$507,510 \$34,776	\$558,260 \$34,776
Total Operating Income	\$312,560	\$312,560	\$341,208	\$341,208	\$372,720	\$372,720	\$416,076	\$416,076	\$454,206	\$454,206	\$496,146	\$496,146	\$542,286	\$542,286	\$593,036
Total Operating and Maintenance Expenses (4)	\$111,200	\$115,090	\$119,120	\$123,290	\$127,610	\$132,080	\$136,700	\$141,480	\$146,430	\$151,560	\$156,860	\$162,350	\$168,030	\$173,910	\$180,000
Net Income (before Debt Service)	\$201,360	\$197,470	\$222,088	\$217,918	\$245,110	\$240,640	\$279,376	\$274,596	\$307,776	\$302,646	\$339,286	\$333,796	\$374,256	\$368,376	\$413,036
Debt Service (3)	\$434,700	\$434,700	\$434,700	\$434,700	\$434,700	\$434,700	\$434,700	\$434,700	\$434,700	\$434,700	\$434,700	\$434,700	\$434,700	\$434,700	\$434,700
Net Income (Loss)	(\$233,340)	(\$237,230)	(\$212,612)	(\$216,782)	(\$189,590)	(\$194,060)	(\$155,324)	(\$160,104)	(\$126,924)	(\$132,054)	(\$95,414)	(\$100,904)	(\$60,444)	(\$66,324)	(\$21,664)
Cummulative	(\$233,340)	(\$470,570)	(\$683,182)	(\$899,964)	(\$1,089,554)	(\$1,283,614)	(\$1,438,938)	(\$1,599,042)	(\$1,725,966)	(\$1,858,020)	(\$1,953,434)	(\$2,054,338)	(\$2,114,782)	(\$2,181,106)	(\$2,202,770)
Debt Service Coverage	0.46	0.45	0.51	0.50	0.56	0.55	0.64	0.63	0.71	0.70	0.78	0.77	0.86	0.85	0.95

Notes:

- (1) Assumes all previously submitted construction costs, issuance, and revenue estimates are based on Year 2002 figures.
- (2) Assumes permit and hourly rate increases every 2nd year of on average 10%.
- (3) APR = 7% (0.58/mo) for years 1-5, 8% (0.667/mo.) for years 6-15. The 7% was also utilized in assessing interest income and interest expense.
- (4) The 2002 fiscal estimates for operating and maintenance expenses were projected to the Year 2003 by applying an annual 3.5% inflation factor. Annual increases in O&M expenses reflect the same 4% annual increase as applied to parking



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City Hall Site Concepts, Cost Estimates and Financial Feasibility

The City Hall site presented numerous opportunities and configurations for structured parking because of its generous length and width dimension. As such, DESMAN developed two structured parking concepts for this site, one that maximized the number of potential parking spaces (see Appendix Exhibit B1-1 through B1-3) and one that preserved a "development footprint" along Knox Rd. (see Appendix Exhibit B2-1 through B2-2). By preserving this property on Knox Rd., the City would offer this property for sale to the private sector and the sale could help reduce the final development cost of the garage. Under the maximized parking concept as many as 433 spaces could be developed on this site. Under the preserved footprint concept as many as 251 spaces can be developed and, with an appropriate service setback from the garage, as much as 8,500 square feet of retail space (on one level) could be created (see Table 16a). Note both space counts assume four parking levels for comparative purpose. Additionally levels can be added if additional spaces are required. Obviously, any concept on this site would require demolition of City Hall and the loss of 37 existing parking spaces.

Table 16a
Site B-The City Hall Site with Adjacent Retail Parcel
Space Count and Construction Cost Estimate

Area / Car Count										
	Area / Car Count									
Level	Spaces	Area (Sq.Ft.)	Sq.Ft./Space							
Roof	30	10,300	343							
Three	79	25,100	318							
Two	79	25,100	318							
One	63	21,490	341							
Total	251	81,990	327							

Building Area Summary & Construction Cost Estimate

Total Area -	81 990 sf
Total Retail Area =	NA sf
Total Parking Area =	81,990 sf

Per Unit Construction Cost Figures (per Square Foot)

Parking Cost =	\$40 sf
Retail (Shell) Cost =	NA sf

Total & Per Space Construction Costs

Total Parking Area =	\$3,279,600
Total Retail Area =	NA

Total Construction Cost = \$3,279,600 Per Space Construction Cost = \$13,066



Because the future demand in the area does not call for the construction of a 433 (or greater) space parking structure, DESMAN's financial analysis focused on the more flexible preserved development footprint scheme.

Presuming a relatively high level of architectural/façade treatment, and therefore a \$40 per square foot construction cost figure, the per space cost to construct is estimated at \$13,066, or \$3,279,600. This cost does not include the adjacent retail parcel. Table 16a presents the space, area, and cost figure calculations.

Table 16b presents the project cost calculations. Based on these figures, the annual debt service payment on the project is estimated at \$348,900. As with the "Willoner" site, land acquisition costs have not been included in this analysis. Given the City's ownership of this property that may be an easy assumption. But while this project includes the cost to demolish City Hall (\$56,400), it does not include the cost to build a new City Hall somewhere else (presumably on the Special Lot site).

Table 16b Site B-The City Hall Site with Adjacent Retail Parcel Parking Development Cost Calculation

PROJECT COST CALCULATION	
Construction (1)	\$3,279,600
Professional Services (2)	\$327,960
Demolition Cost (3)	\$56,400
Total Development Cost	\$3,663,960
Financing Costs	
Cost of Issuance and Other Fees (4)	\$133,790
Debt Service Reserves (5)	\$348,900
Net Interest During Construction (6)	\$313,070
Subtotal:	\$795,760
Total Project Cost	\$4,459,720
LOAN CALCULATION (7)	
Principal	\$4,459,720
Interest Rate	6.0%
Term (years)	25
Annual Debt Service	\$348,900

NOTE

- (1)For purposes of comparing parking development costs, these figures exclude any retail space construction costs.
- (2) Professional Services include architectual/engineering fees, survey, soil reporting and testing, P.E. inspection, and legal services and is approximately 10% of construction costs.
- (3) Cost to demolish City Hall based on total square foot area of building and \$3 per sq.ft. cost unit.
- (4) Approximately 3% of total project cost.
- (5) Equal to one year annual debt service.
- (6) Capitalized interest during first 14 mo minus interest earned on construction budget during periodicdrawdowns.
- (7) The loan calculation was illustrated for comparative purposes only as significant financial information is required from the City.



Table 16c estimates the annual parking revenue that would be generated by monthly permits, residential permits (students), weekday transient parkers, and weekend transient parkers. This site benefits from the fact that the demand for parking is already high in this area, and that as many as 77 existing spaces would be displaced (City Hall Lot and the Special Lot), thereby increasing demand within the new structure. Furthermore, the structure would benefit from additional demand that would be generated by the 8,500 square foot commercial project along Knox Rd. As such the potential parking revenue may be slightly higher than at the "Willoner" site. The resulting annual revenue to cover debt service payments is estimated at \$186,400.

Table 16c Site B-The City Hall Site with Adjacent Retail Parcel Parking Revenue and Operating Expense Estimates

Monthly Permits	\$55,440
(70 spaces * 1.1 oversell * \$60/mo.)	
Residential (Student) Monthly Permits	\$48,000
(50 spaces * 1.0 oversell * \$80/mo.)	
Weekday Transients	\$236,600
(130 spaces *3.5 car turnover * \$2 avg. ticket)	
Weekend Transients	\$67,600
(130 spaces * 2.5 car turnover * \$2 avg. rate * 104 days)	
Total Annual Parking Revenue	\$359,640
Annual Operating Expenses (5)	
ğ	\$359,640 \$173,200

Table 16d presents a 15-Year proforma analysis of the City Hall garage. It includes annual revenue and expense escalations. During the first full year of parking operations (Year 2004), the garage would generate a net loss of \$141,530 (Debt Service Cover of 0.75). However, with modest and periodic rate increases of 10% every 2nd year, the City Hall garage would reach financial balance by Year 2011.

Structured Parking Recommendation

Based on the preliminary site selection and financial feasibility analysis that was completed, DESMAN recommends that the City move forward with the development of a parking structure on the City Hall site. In DESMAN's opinion, this site is closer to current and projected deficits areas, has slightly better vehicular and pedestrian access opportunities, and has the potential to

Table 16d
Site B-The City Hall Site with Adjacent Retail Parcel
Proforma: Statement of Operations and Debt Service Coverage

	FY 2002 (1) Year 1	FY 2003 Year 2	FY 2004 Year 3	FY 2008 Year 4	FY 2006 Year 5	FY 2007 Year 6	FY 2008 Year 7	FY 2009 Year 8	FY 2010 Year 9	FY 2011 Year 10	FY 2012 Year 11	FY 2013 Year 12	FY 2014 Year 13	FY 2015 Year 14	FY 2016 Year 15
Parking Income (2) Interest on Reserve (3)	\$359,640 \$20,930	\$359,640 \$20,930	\$395,604 \$20,930	\$395,604 \$20,930	\$435,160 \$20,930	\$435,160 \$20,930	\$478,680 \$27,912	\$478,680 \$27,912	\$526,550 \$27,912	\$526,550 \$27,912	\$579,210 \$27,912	\$579,210 \$27,912	\$637,130 \$27,912	\$637,130 \$27,912	\$700,840 \$27,912
Total Operating Income	\$380,570	\$380,570	\$416,534	\$416,534	\$456,090	\$456,090	\$506,592	\$506,592	\$554,462	\$554,462	\$607,122	\$607,122	\$665,042	\$665,042	\$728,752
Total Operating and Maintenance Expenses (4)	\$173,200	\$179,260	\$185,530	\$192,020	\$198,740	\$205,700	\$212,900	\$220,350	\$228,060	\$236,040	\$244,300	\$252,850	\$261,700	\$270,860	\$280,340
Net Income (before Debt Service)	\$207,370	\$201,310	\$231,004	\$224,514	\$257,350	\$250,390	\$293,692	\$286,242	\$326,402	\$318,422	\$362,822	\$354,272	\$403,342	\$394,182	\$448,412
Debt Service (3)	\$348,900	\$348,900	\$348,900	\$348,900	\$348,900	\$348,900	\$348,900	\$348,900	\$348,900	\$348,900	\$348,900	\$348,900	\$348,900	\$348,900	\$348,900
Net Income (Loss)	(\$141,530)	(\$147,590)	(\$117,896)	(\$124,386)	(\$91,550)	(\$98,510)	(\$55,208)	(\$62,658)	(\$22,498)	(\$30,478)	\$13,922	\$5,372	\$54,442	\$45,282	\$99,512
Cummulative	(\$141,530)	(\$289,120)	(\$407,016)	(\$531,402)	(\$622,952)	(\$721,462)	(\$776,670)	(\$839,328)	(\$861,826)	(\$892,304)	(\$878,382)	(\$873,010)	(\$818,568)	(\$773,286)	(\$673,774)
Debt Service Coverage	0.59	0.58	0.66	0.64	0.74	0.72	0.84	0.82	0.94	0.91	1.04	1.02	1.16	1.13	1.29

Notes:

- (1) Assumes all previously submitted construction costs, issuance, and revenue estimates are based on Year 2002 figures.
- (2) Assumes permit and hourly rate increases every 2nd year of on average 10%.
- (3) APR = 7% (0.58/mo) for years 1-5, 8% (0.667/mo.) for years 6-15. The 7% was also utilized in assessing interest income and interest expense.
- (4) The 2002 fiscal estimates for operating and maintenance expenses were projected to the Year 2003 by applying an annual 3.5% inflation factor. Annual increases in O&M expenses reflect the same 4% annual increase as applied to parking



immediately support commercial development activity along Knox Rd. We further suggest that this initial four level 35 foot tall structure be designed so that two additional vertical levels can be added in the future, thus bringing to total potential capacity to 400 spaces.

Structured Parking Feasibility and Shared Public/Private Sector Responsibilities

The review of financial proforma statements for both the "Willoner" site garage and the City Hall site garage revealed the basic financial norm of parking structures; they rarely pay for themselves. The parking revenue that a structure generates does not normally cover the annual cost to develop, operate or maintain the facility. In fact, some municipalities that DESMAN has worked for are pleased to find that the revenues simply cover annual operating and maintenance expenses. This is why parking structures are best viewed as a utility or as public infrastructure. Parking's value is not in the direct revenues or profits that it generates but in the added value it provides to nearby/adjacent land use activities. Like roads, sewers, and electrical utilities, parking provides a basic public service, increases the viability or success of a particular activity (offices, shops, restaurants, etc.), and, in turm, increases the revenue stream associated with property and sales taxes. While DESMAN is not qualified to assess the tax implications associated with the above parking garage recommendations, a review of basic financial strategies that the City can explore is required.

Basic Overview of Alternative Financing Strategies

These options were selected based on a detailed evaluation of similar municipalities which have implemented similar financial programs for the purpose of establishing a parking facility.

General Obligation Bonds - The primary advantage of financing the parking facility through General Obligation Bonds (GO Bonds) is that a low rate of interest can be obtained because the full faith and credit of the municipality will be pledged toward retirement of the bonds. Because the basis of a city's credit is its taxing powers, constitutional and statutory laws usually limit the amounts that local governments may borrow using GO Bonds. The borrowing limits are usually expressed in terms of a specific percentage of the assessed value of the community's taxable property. A possible disadvantage in using GO Bonds is that the potential credit available for non-parking purposes, such as parks and public buildings, would be reduced by the amount of the bond issue used for a parking facility. Advocates, however, stress that the tax base of the downtown core is being strengthened by the development of a needed parking facility just as it is strengthened by other public infrastructure.



Revenue Bonds - Through the development of a public benefit, nonprofit corporation, such as a parking authority, established to develop and assist in the growth and maintenance of commercial facilities with the City/County revenue bonds may be obtained. Such an authority would have the ability to receive public property from the City/County to be used on a project which would promote the welfare of the community, stabilize the local economy, and provide employment. Furthermore, this authority would be empowered to issue Revenue Bonds for the purpose of purchasing the necessary property and financing the public project. Revenues from the project would be used to meet the annual operating costs and debt service payments.

Unfortunately, this option relies heavily upon the facility's ability to support its own operations and debt payment through the revenues that facility generates. The initial estimates of the cost of construction, operation and maintenance, and general revenues for the "Willoner" garage or the City Hall garage indicated that such internal support does not appear sufficient. However, the City does generate approximately \$200,000 per year in meter parking revenue. DESMAN does suggest that meter rates in College Park are below what market demand could determine for those spaces. As such, a 50% or 75% increase in rates that are accomplished over time would yield a revenue stream of between \$300,000 and \$350,000 per year. As illustrated in the financial proforma statements, meter revenue that could be pledged to the parking structure could make issuance of a revenue bond more attractive.

Tax Increment Financing / **Special Tax Districts** - Tax Increment Financing (TIFs) has been authorized by the state legislation to permit a certain portion of a municipal property tax levied on property in a designated development district to be placed in a special fund to be applied to the repayment of bonds. The benefit of such legislation creates a taxing district where tax revenues may be applied toward the creation of public facilities which would directly benefit those businesses that exist within the tax district.

These tax districts, however, would draw revenues away from the general fund, thereby lowering the amount of City revenue which supports other publicly finding activities such as police and fire, education, park and recreation, etc.

Joint Ventures and Contributions - Various public, nonprofit and private interests can participate in the financing of a structured parking facility. Capital contributions and in-kind contributions (such as land) can "write down" the cost of development. Joint ventures can effectively write down capital costs to the extent that revenue bond financing and/or conventional financing may be procured.



Recommended Financing Alternatives

Based on the overview provided, DESMAN suggests that the City of College Park has two alternatives that should be used in tandem; the creation of a Special Tax District and the legislation of development "fees-in-lieu" to support the development of a parking garage on the City Hall site.

In the case of College Park, the formation of a Special Tax District to partially support the construction of the City Hall garage would be exponentially more effective than the fees-in-lieu as fees-in-lieu are depending on development and redevelopment activity, of which there isn't a meaningful amount at this time (see Table 12). Properties that don't provide the required number of parking spaces (per Zoning Ordinance) would be required to pay a special parking tax. Based on the proforma study of the City Hall garage, a revenue shortfall of \$141,530 would exist from the first year of operation. That shortfall would eventually begin to decrease as programmed rate increases take effect. Theoretically, the special tax on area businesses and properties would only be (per legislation) equal to the amount of the shortfall each year.

To determine the actual square foot tax at this time would be premature as properties that provide parking would be (it is presumed) exempt from this tax. However, for discussion purposes, DESMAN compared the \$141,530 first year debt service loss to the total amount of building square feet within the study area (284,300 sq.ft.) and, based on those figures, the first year per square foot tax would be \$0.498. Therefore, a 10,000 square foot restaurant would pay a first year Special Parking Tax of \$4,978.

Fees-in-lieu payments have a mixed record, particularly as it relates to the waver of on-site parking requirements for new development. DESMAN's experience in Annapolis, Maryland and Frederick, Maryland find that fee-in-lieu of are often at the discretion of political wills. Depending on the type of development that is proposed/encourage by the municipality, developers generally negotiate fees-in-lieu away. Furthermore, developers, particularly of larger scale commercial and residential projects, typically require dedicated parking on their site on our adjacent/contiguous sites. A municipality's offer of nearby publicly accessible parking is much less "marketable" for that developer and its leasing agent. While determining the recommended fee based on parking construction and operating cost for either surface or structured parking is easy, the negotiating leverage that a municipality has to require such payment is difficult to calculate as conditions can vary greatly depending both the municipality and the developer.

However, municipalities do have hard and fast financial information to support hard and fast parking fee-in-lieu of figures that, in theory, would not be negotiated away. In the case of the City Hall parking garage, the cost to develop that project



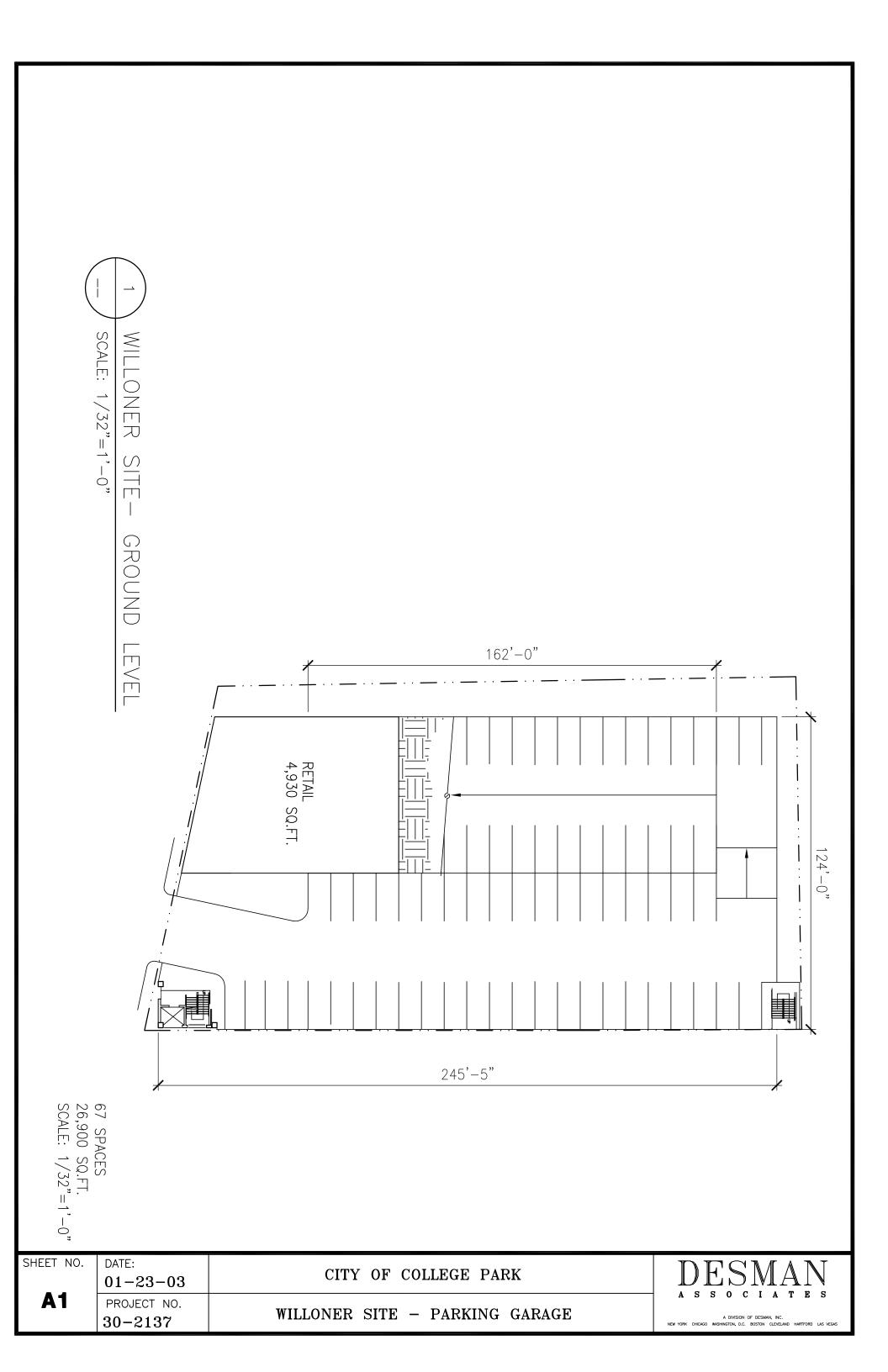
was estimated at \$14,597 which equals the total project cost of \$4,459,720 (see Table 16b) divided by the number of spaces (251). While a surface lot concept was not developed as part of this study, surface space development costs typically equal \$2,500.

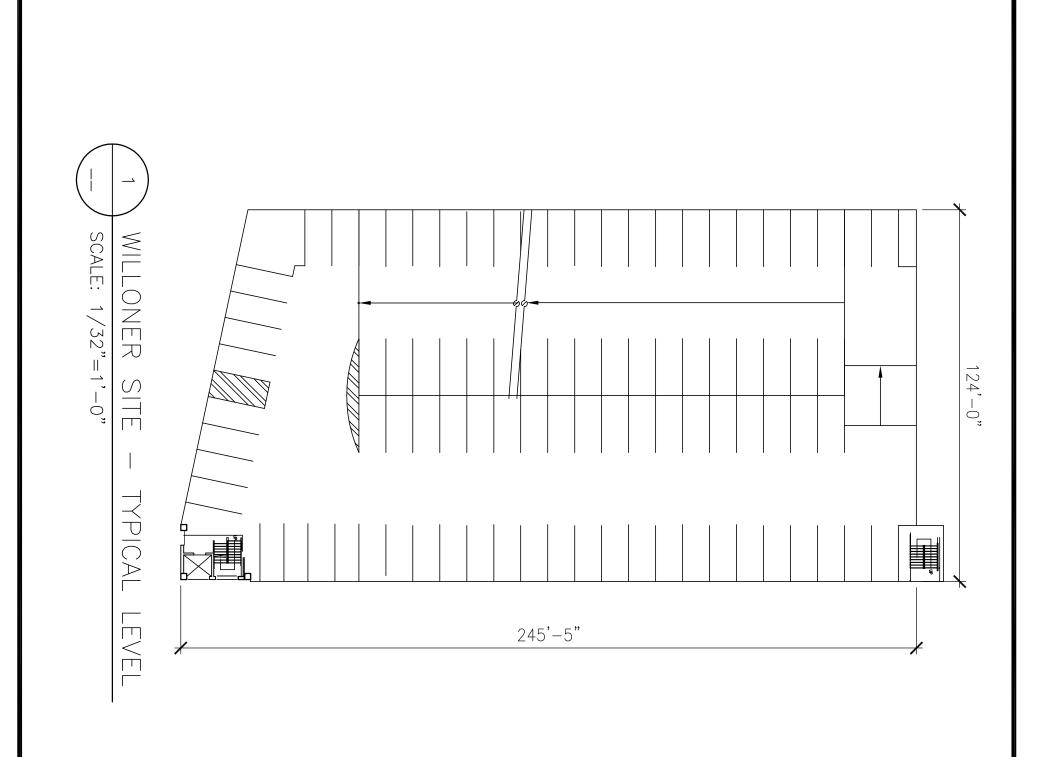
Unfortunately for City negotiators and decisions makers the range presented here (\$14,597 and \$2,500) is not too specific. While the higher fee is obviously more desirable, reality would suggest that the final fee-in-lieu that would be extracted from a particular developer would be based the type of parking space that the municipality has actually provided. For example, the City has created a large surface lot adjacent to an undeveloped parcel in the downtown. A developer of that parcel would expect that that surface lot would be available to support its development. Therefore, that developer would be more willing to pay a fee equal to developing a surface space (\$2,500) and not the large fee associated with a structured space.

Conclusion & Recommendation

DESMAN recommends that the City proceed with the development of a parking structure on the City Hall site and develop a developer RFP for the adjacent/undeveloped Knox Rd. parcel (8,500 sq.ft. of retail). Additionally, the City should begin drafting legislation for the Special Parking Tax District, noting the specific funding balance limitation of the district. Finally, the City should utilize the project cost estimate figures develop herein for the City Hall garage as the "starting point" for the developer fees-in-lieu requirements.

However, before the City begins these actions, it should seriously consider revisiting its current parking management and operation approach. While not included in the scope of this site selection and feasibility study, DESMAN found an uncomfortable relationship between meter locations (on private property), meter pricing (below market for the area), parking enforcement revenue, and the City's General Fund. The operations and management complexity associated with a parking structure will further confuse the role that public parking should play in College Park. Under a more dedicated program, merged meter and garage parking revenues could prove sufficient to promote the development of structured parking, promote the redevelopment of the area through parking wavers, special taxes and fees-in-lieu, and keep parking user fees as low as possible so as not to discourage shoppers, diners and other visitors from frequenting the area.





91 SPACES 29,400 SQ.FT. SCALE: 1/32"=1'-0"

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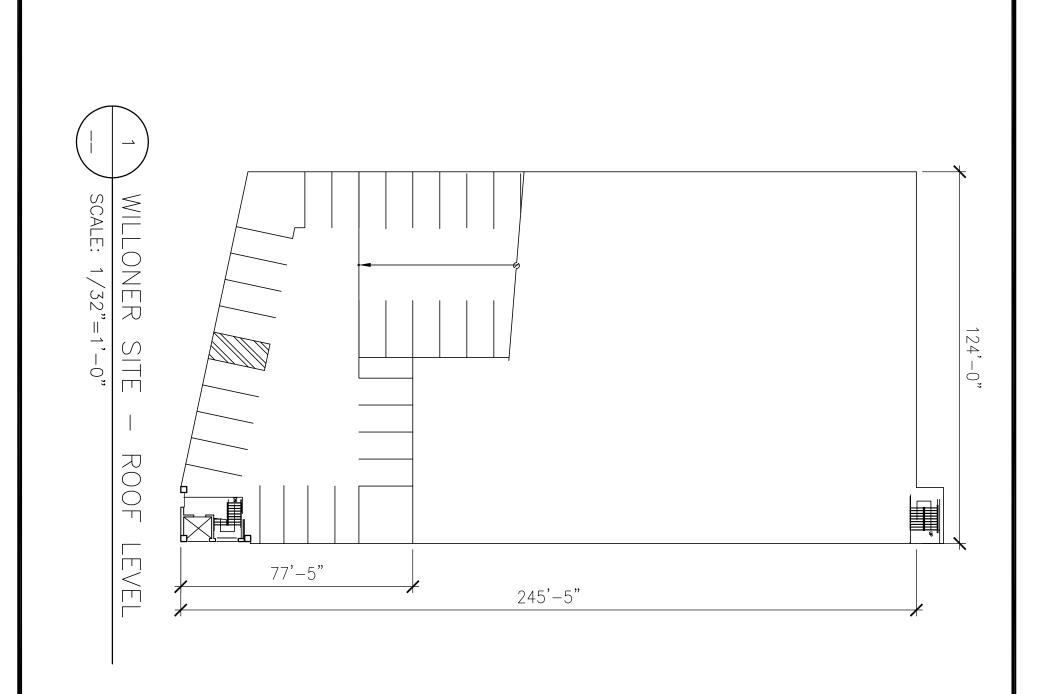
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DATE: 01-23-03	CITY OF COLLEGE PARK
PROJECT NO. 30-2137	WILLONER SITE - PARKING GARAGE

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29 SPACES 10,470 SQ.FT. SCALE: 1/32"=1'-0"

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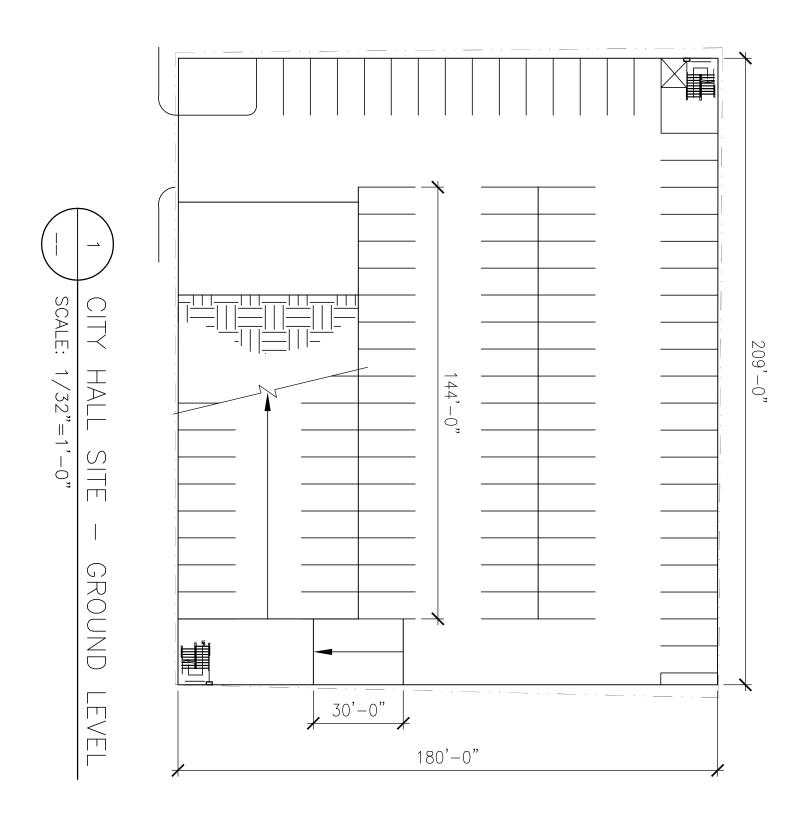
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DATE: 01-23-03	CITY OF COLLEGE PARK
PROJECT NO. 30-2137	WILLONER SITE - PARKING GARAGE

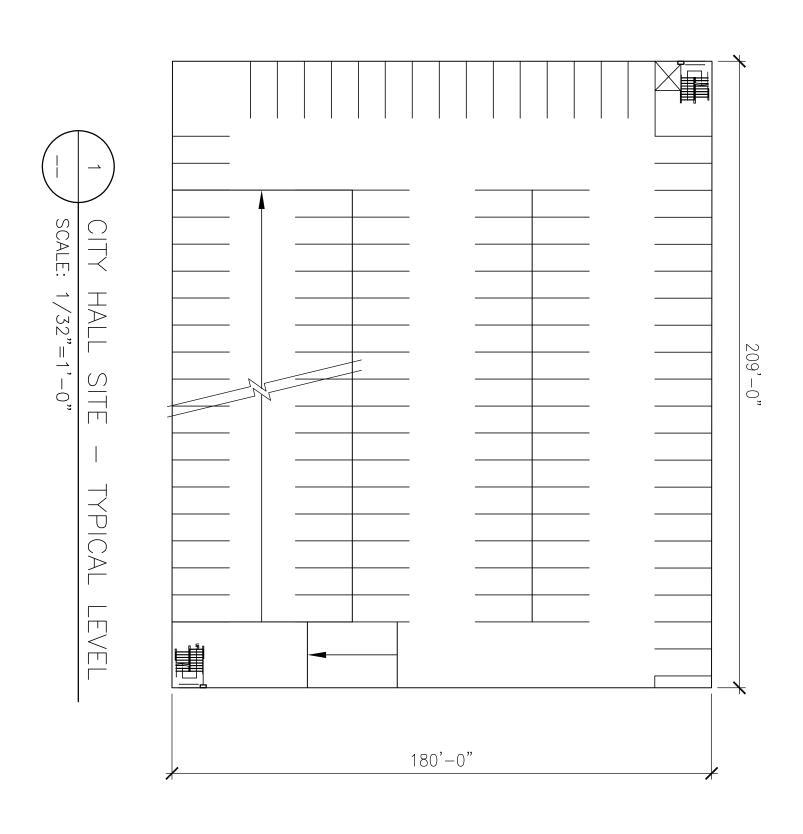
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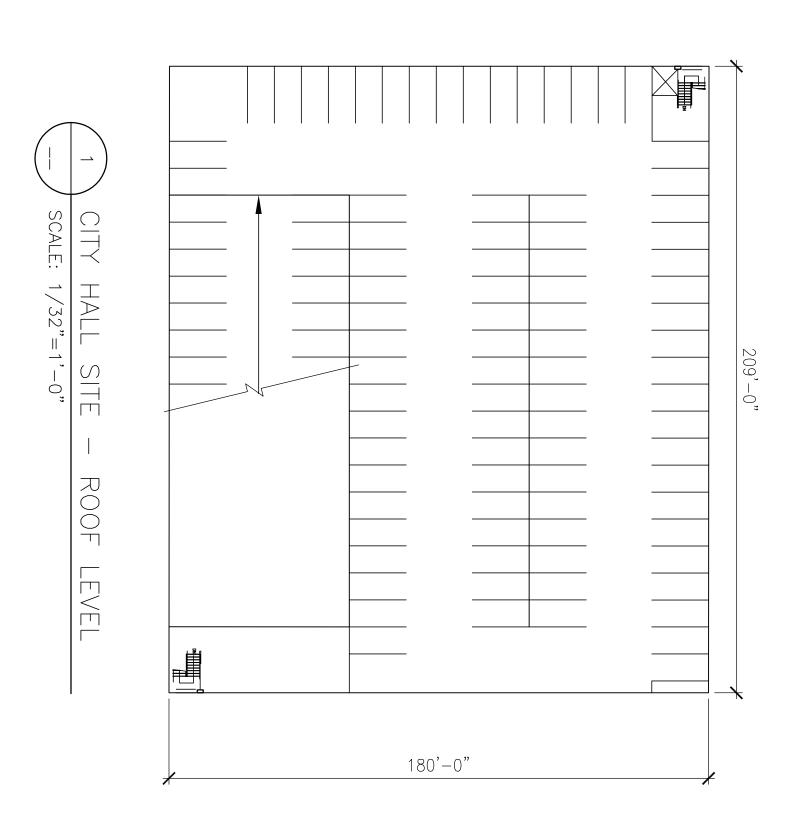


35,400 SQ. FT. 100 SPACES SCALE: 1/32"=1'-0"



37620 SQ. FT. 117 SPACES SCALE: 1/32"=1'-0"

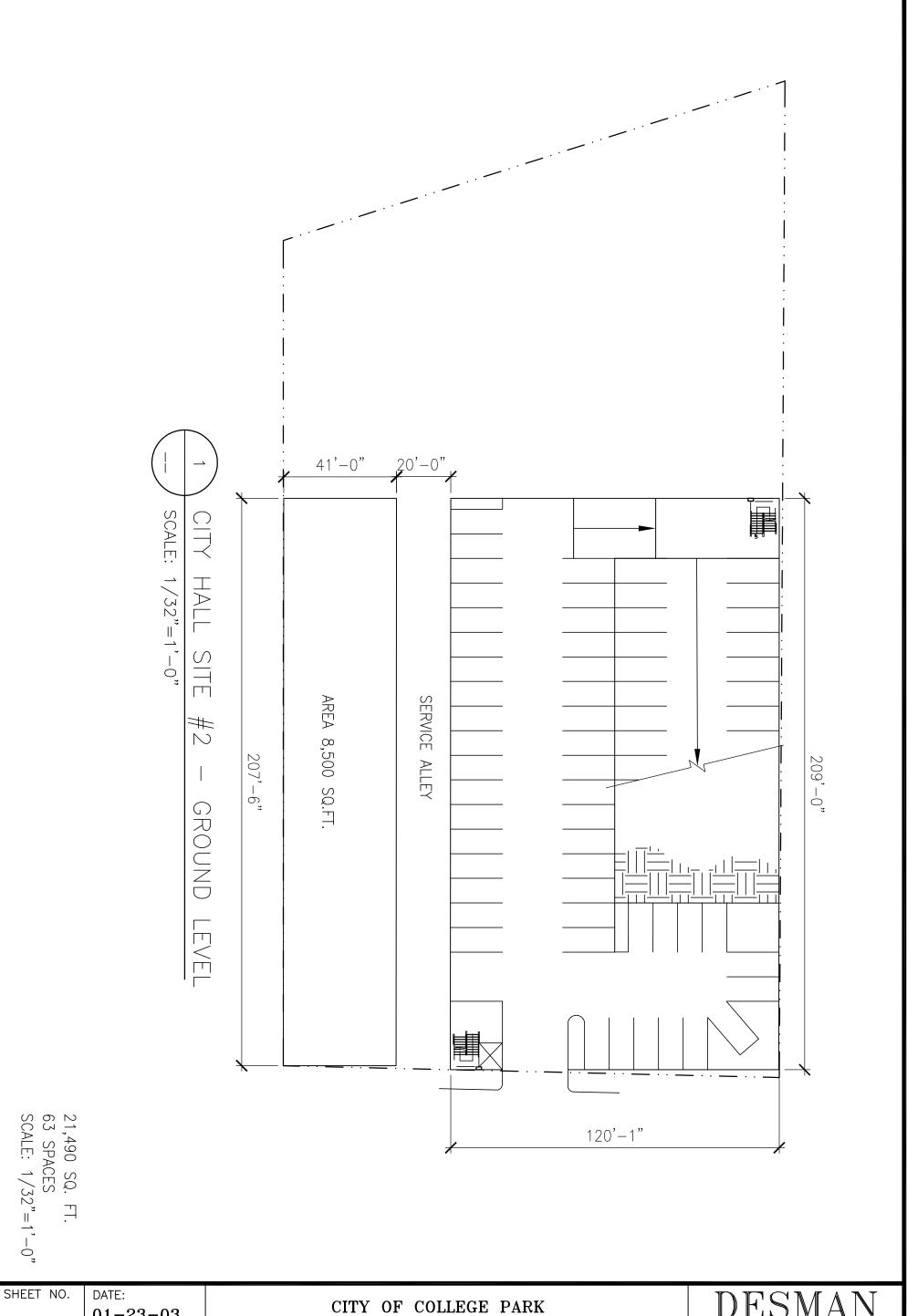
SHEET NO. DATE: CITY OF COLLEGE PARK 01-23-03 **B1-2** PROJECT NO. CITY HALL SITE SCHEME #1 - PARKING GARAGE A DIVISION OF DESMAN, INC. NEW YORK CHICAGO WASHINGTON, D.C. BOSTON CLEVELAND HARTFORD LAS VEGAS 30-2137



33,000 SQ. FT. 99 SPACES SCALE: 1/32"=1'-0"

SHEET NO. DATE:
01-23-03
PROJECT NO.
30-2137
CITY HALL SITE SCHEME #1 - PARKING GARAGE

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NEW YORK CHICAGO WASHINGTON, D.C. BOSTON CLEVELAND HARTFORD LAS VECAS



B2-1

01 - 23 - 03PROJECT NO. CITY HALL SITE SCHEME #2 - PARKING GARAGE 30-2137

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NEW YORK CHICAGO WASHINGTON, D.C. BOSTON CLEVELAND HARTFORD LAS VEGAS

1) CITY HALL SITE #2 — TYPICAL LEVEL

SCALE: 1/32"=1'-0"

25,100 SQ. FT. 79 SPACES SCALE: 1/32"=1'-0"

B2-2

PROJECT NO.
30-2137

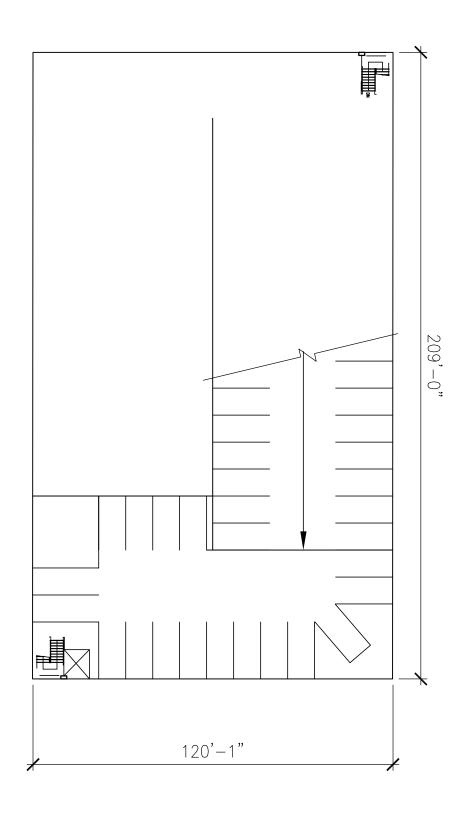
DATE:
CITY OF COLLEGE PARK

CITY HALL SITE SCHEME #2 - PARKING GARAGE

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1 CITY HALL SITE #2 — ROOF LEVEL ...) SCALE: 1/32"=1'-0"



10,300 SQ. FT.
30 SPACES
SCALE: 1/32"=1'-0"

B2-3

PROJECT NO.
30-2137

CITY HALL SITE SCHEME #2 - PARKING GARAGE

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